

CLAIMS

Claims 1-10 (cancelled)

11. (previously presented) An ultra-wideband communication device, comprising:

a first transceiver structured to communicate at a first data rate; and

a second transceiver structured to communicate at a second data rate, with the first and the second transceivers structured to transmit and receive ultra-wideband signals.

12. (original) The ultra-wideband communication device of claim 11, wherein the first data rate transmits data at a rate that ranges between about 1 kilobit per second to about 5 megabits per second.

13. (original) The ultra-wideband communication device of claim 11, wherein the second data rate transmits data at a rate that ranges between about 5 megabits per second to about 1 gigabit per second.

14. (original) The ultra-wideband communication device of claim 11, wherein:

the first transceiver communicates at the first data rate; and

the second transceiver is kept off.

15. (original) The ultra-wideband communication device of claim 11, wherein:

the first transceiver communicates at the first data rate; and

the second transceiver kept off until communication at the second data rate is desired.

16. (previously presented) An ultra-wideband communication network, comprising:

at least two ultra-wideband communication devices, each device structured to transmit and receive data using at least two data rates, and each device including a first ultra-wideband transceiver structured to communicate at a first data rate and a second ultra-wideband transceiver structured to communicate at a second data rate; and

a master ultra-wideband transceiver structured to communicate with the at least two ultra-wideband communication devices, and structured to direct data through the network selectively using the two data rates.

17. (original) The ultra-wideband communication network of claim 16, wherein each of the two data rates are selected from a group consisting of: one kilobit per second, five megabits per second, 25 megabits per second, 50 megabits per second, 100 megabits per second, 200 megabits per second, 400 megabits per second, 480 megabits per second, 500 megabits per second, and one gigabit per second.

18. (original) The ultra-wideband communication network of claim 16, wherein the master ultra-wideband transceiver chooses one of the two data rates by determining a communication data rate capability of each of the at least two ultra-wideband communication devices.

19. (original) The ultra-wideband communication network of claim 16, wherein each of the at least two ultra-wideband communication devices transmit a plurality of pulses.

20. (original) The ultra-wideband communication network of claim 19, wherein each of the plurality of pulses has duration that ranges from about ten picoseconds to about one millisecond.

21. (original) The ultra-wideband communication network of claim 16, wherein each of the at least two ultra-wideband communication devices transmits a plurality of orthogonal frequency division multiplexing signals.

22. (original) The ultra-wideband communication network of claim 16, wherein each of the at least two ultra-wideband communication devices includes a low data rate transceiver and a high data rate transceiver.

23. (previously presented) An ultra-wideband communication network, comprising:

an ultra-wideband communication device comprising a first ultra-wideband transceiver structured to communicate at a first data rate and a second ultra-wideband transceiver structured to communicate at a second data rate; and

a master ultra-wideband transceiver structured to transmit and receive data using at least two data rates;

wherein the master ultra-wideband transceiver determines a data rate capability of the ultra-wideband communication device.

24. (original) The ultra-wideband communication network of claim 23, wherein the master ultra-wideband transceiver communicates the ultra-wideband communication device at the determined data rate capability.

25. (original) The ultra-wideband communication network of claim 23, wherein the master ultra-wideband transceiver transmits a beacon signal containing information selected from a group consisting of: geographic location information, and a data communication rate capability.

26. (original) The ultra-wideband communication network of claim 23, wherein each of the two data rates are selected from a group consisting of: one kilobit per second, five megabits per second, 25 megabits per second, 50 megabits per second, 100 megabits per second, 200 megabits per second, 400 megabits per second, 480 megabits per second, 500 megabits per second, and one gigabit per second.

27. (original) The ultra-wideband communication network of claim 23, wherein the ultra-wideband communication device transmits a request to the a master ultra-wideband transceiver to communicate using only one of the data rates.

28. (previously presented) The ultra-wideband communication network of claim 23, wherein the master ultra-wideband transceiver transmits a shut-down command signal to the ultra-wideband communication device.